

## DETAILED ACTION

This Office Action is in response to the amendment filed October 24, 2008. All previous rejections have been withdrawn unless stated below.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### *Claims*

#### Claim Objections

Claims 158-164, and 166-172 are objected to because of the following informalities: The phrase ", and wherein the" needs to be deleted from the end of the claim 158. Appropriate correction is required.

#### Claim Rejections - 35 USC § 103 – Obviousness (New Rejection)

Claims 158-164, 166-202, 205-207, 215 and 216 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leaderman (US 6,458,380) in view of Gallopo et al. (US 2001/0002252) and Sagel et al. (US 5,891,453).

Leaderman discloses preparation delivery systems such as films that are used to deliver agents such as whitening agent to the teeth (see Abstract). The whitening agents include hydrogen peroxide. The compositions are dehydrated powders or foams. The system may comprise a water-soluble polymer that forms a viscous gel when

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hydrated (col. 1, lines 42-55). It is concluded that these gels have adhesive strength because they form viscous gels and the reference also suggests using polymers with adhesive strength (col. 5, lines 10 and 11). The gel formulation provides advantageous controlled release and increased contact time with the intended oral cavity site (col. 2, lines 37-45). The compositions have a structure of a gel/carrier or a gel/carrier/backing (col. 2, lines 49-51). The polymers used include polyvinyl pyrrolidone (col. 4, lines 4-8). Thickeners that may be incorporated into the gels include hydroxypropyl methyl cellulose (col. 5, lines 30-33). The reference differs from the instant claims insofar as it does not disclose sodium tripolyphosphate or the contact area width.

Gallopo et al. disclose an oral composition for whitening teeth comprising a water soluble alkali metal tripolyphosphate and a source of active oxygen (see Abstract). The tripolyphosphate includes sodium tripolyphosphate (paragraph 0016). A source of active oxygen includes hydrogen peroxide (paragraph 0020). Binders and thickening agents include PVP and celluloses (paragraph 0060). The reference differs from the instant claims insofar as it does not disclose the compositions are dry patches with the disclosed contact area.

Sagel et al. disclose delivery systems for tooth whiteners. The whiteners include hydrogen peroxide (col. 8, lines 4 and 5) and humectants as carriers such as glycerin (col. 9, lines 41-45). The width of the strip of material will depend upon many factors, including whether or not the strip of material wraps around the teeth and covers both surfaces of the tooth. The width of the strip of material is from about 0.5 cm to about 4 cm and preferably from about 1 to about 2 cm (col. 6, lines 11-16). Adhesives include

polyvinyl pyrrolidone (col. 9, lines 34-37). The reference differs from the instant claims insofar as it does not disclose the compositions are dry or comprise tripolyphosphate.

Generally, it is *prima facie* obvious to combine two components, such as two whitening agents hydrogen peroxide and sodium tripolyphosphate, each of which is taught by the prior art to be useful for same purpose, in order to form a third composition to be used for the very same purpose. The idea for combining them flows logically from their having been individually taught in the prior art. See MPEP 2144.06.

It would have been obvious to one of ordinary skill in the art to make the delivery systems of the combined references of Leaderman and Gallopo et al. with the dimensions disclosed by Sagel et al. wherein the width ranges from 0.5 to 4 cm motivated by the desire to make sure the system is an appropriate size to cover the teeth to provide adequate whitening.

In regards to claims 166, 167, 181, 182, 196, and 197, generally, it is *prima facie* obvious to select a known material for incorporation into a composition, based on its recognized suitability for its intended use. See MPEP 2144.07. It would have been obvious to have added plasticizers in the delivery systems of the combined references of Leaderman and Gallopo et al. motivated by the desire to use the components for its known function of being a carrier used in teeth whitening delivery systems as disclosed by Sagel et al.

Claims 158-164, 166-202, 205-207, 215 and 216 are rejected.

Claims 158-164, and 166-172 are objected.

No claims allowed.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEZAH W. ROBERTS whose telephone number is (571)272-1071. The examiner can normally be reached on 8:30 - 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick F. Krass can be reached on 571-272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lezah W Roberts/  
Examiner, Art Unit 1612

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